AUTHOR INDEX TO VOLUME 27 (1987)

Bayley, P.M., see Martin, S.R. 67
Bishop, W.H.
Molecular and macroscopic aspects of cavity formation in the hydrophobic effect 197
Brullemans, M. and Tancrède, P.
Influence of torus on the capacitance of asymmetrical phospholipid bilayers 225

Calabria, A., see Rossi, C. 255
Casini, A., see Rossi, C. 255
Chen, Y.
Binding of *n*-mers to one-dimensional lattices with longer than close-contact interactions 59
Cherek, H., see Szmacinski, H. 233
Chosa, H., see Toko, K. 149

De Jong, H.G., Lyklema, J. and Van Leeuwen, H.P.
Conductometric analysis of the competition between monovalent and divalent counterions in their interaction with polyelectrolytes 173
Divakar, S. and Easwaran, K.R.K.
Conformational studies of A23187 with mono-, di- and trivalent metal ions by circular dichroism spectroscopy 139

Easwaran, K.R.K., see Divakar, S. 139
Escribano, J., García, M., García Cánovas, F., García Carmona, F., Varón, R., Tudela, J. and Lozano, J.A.
Kinetic study of the transient phase of a chemical reaction system coupled to an enzymatically catalyzed step. Application to the oxidation of epinine by tyrosinase 15

Freire, E., see Lopez Mayorga, O. 87
Fujime, S., Takasaki-Ohsita, M. and Ishiwata, S.
Dynamic light-scattering study of muscle F-actin. II 211
Fujiyoshi, T., see Toko, K. 149

García, M., see Escribano, J. 15
García Carmona, F., see Escribano, J. 15
García Cánovas, F., see Escribano, J. 15
Geacintov, N.E., see Zinger, D. 131
Gutowicz, J. and Košmider-Schmidt, A.
Fluorescence investigation on conformational state of rabbit muscle aldolase interacting with phosphatidylinositol liposomes 97

Harvey, R.G., see Zinger, D. 131
Hayashi, K., see Toko, K. 39
Holladay, L.A., see Kelly, L. 77

Iiyama, S., see Toko, K. 39
Ishiwata, S., see Fujime, S. 211

Jayaweera, R., see Szmacinski, H. 233
Jeffery, P.D., see Mark, A.E. 103
Jordan, P.C., see Sung, S.-S. 1
Jordan, P.C., see Vayl, I.S. 7

Kato, S., see Yoshikawa, K. 251
Kelly, L. and Holladay, L.A.
Thermodynamics of alligator metmyoglobin unfolding 77
Klotz, M.G., Müller, E. and Liebermann, B.
Potassium transport through lipid bilayer membranes facilitated by tentoxin dimers. A new mechanism of ion carrier transport? 183
Košmider-Schmidt, A., see Gutowicz, J. 97

Lakowicz, J.R., see Szmacinski, H. 233
Lakowski, J.
Salt effects on internal motions of superhelical and linear pUC8 DNA. Dynamic light scattering studies 263
Laschi, F., see Rossi, C. 255
Liebermann, B., see Klotz, M.G. 183
Lopez Mayorga, O. and Freire, E.
Dynamic analysis of differential scanning calorimetry data 87
Lozano, J.A., see Escribano, J. 15
Lyklema, J., see De Jong, H.G. 173

Marcolongo, R., see Rossi, C. 255
Mark, A.E., Nichol, L.W. and Jeffery, P.D.
The self-association of zinc-free bovine insulin. A single model based on interactions in the crystal that describes the association pattern in solution at pH 2, 7 and 10 103
Martin, S.R. and Bayley, P.M.
Effects of GDP on microtubules at steady state 67
Müller, E., see Klotz, M.G. 183

Nichol, L.W., see Mark, A.E. 103
Norris, L., see Steiner, R.F. 27

Ogata, K., see Toko, K. 149

Picchi, M.P., see Rossi, C. 255

Richard, A.J.
A comparison by ultracentrifugation of the effects on DNA of ethidium bromide and of acridine orange at low ionic strength 191
Rossi, C., Casini, A., Picchi, M.P., Laschi, F., Calabria, A. and Marcolongo, R.
Structural and dynamical characterization of piroxicam by ^{1}H- and ^{13}C-NMR relaxation studies 255

Shinohara, Y., see Yoshikawa, K. 251
Sigel, H., see Tribolet, R. 119
Steiner, R.F. and Norris, L.
Rotational modes of Ca^{2+}-liganded calmodulin, as determined by time-domain fluorescence 27
Sung, S.-S. and Jordan, P.C.
The interaction of Cl^{-} with a gramicidin-like channel 1
Szmacinski, H., Jayaweera, R., Cherek, H. and Lakowicz, J.R.
Demonstration of an associated anisotropy decay by frequency-domain fluorometry 233

Tajmir-Riahi, H.A.
Sugar interaction with biologically active *cis*-$PtCl_2(NH_3)_2$ (anticancer) and its inactive *trans* isomer 243
Takasaki-Ohsita, M., see Fujime, S. 211
Tanaka, C., see Toko, K. 39
Tancrède, P., see Brullemans, M. 225
Terada, H., see Yoshikawa, K. 251
Toko, K., Fujiyoshi, T., Ogata, K., Chosa, H. and Yamafuji, Ka.
Theory of electric dissipative structure in Characean internode 149
Toko, K., Iiyama, S., Tanaka, C., Hayashi, K., Yamafuji, Ke. and Yamafuji, Ka.
Relation of growth process to spatial patterns of electric potential and enzyme activity in bean roots 39
Tribolet, R. and Sigel, H.
Self-association of adenosine 5′-monophosphate (5′-AMP) as a function of pH and in comparison with adenosine, 2′-AMP and 3′-AMP 119
Tudela, J., see Escribano, J. 15

Van Leeuwen, H.P., see De Jong, H.G. 173
Varón, R., see Escribano, J. 15
Vayl, I.S. and Jordan, P.C.
Electrostatic modeling of ion pores. Multipolar sources 7

Yamafuji, Ka., see Toko, K. 39
Yamafuji, Ka., see Toko, K. 149
Yamafuji, Ke., see Toko, K. 39
Yoshikawa, K., Shinohara, Y., Terada, H. and Kato, S.
Why is Mg^{2+} necessary for specific cleavage of the terminal phosphoryl group of ATP? 251

Zinger, D., Geacintov, N.E. and Harvey, R.G.
Conformations and selective photodissociation of heterogeneous benzo(*a*)pyrene diol epoxide enantiomer-DNA adducts 131

SUBJECT INDEX TO VOLUME 27 (1987)

Ab initio calculation
ATP; Molecular orbital (Yoshikawa, K.) 251

Acid elongation
Electric potential; Enzyme activity; Dissipative structure; Nonequilibrium; (Bean root) (Toko, K.) 39

F-Actin
Dynamic light scattering; Heavy meromyosin; Filament flexibility; Semidilute solution (Fujime, S.) 211

Adrenergic drug
Enzyme kinetics; Transient phase; Tyrosinase; Catecholamine; Deoxyepinephrine (Escribano, J.) 15

Aldolase
Enzyme-lipid interaction; Fluorescence quenching; Conformational change; Temperature dependence (Gutowicz, J.) 97

Alkali polyacrylate
Conductometry; Competitive counterion binding; Polyelectrolyte (De Jong, H.G.) 173

2′-AMP
3′-AMP; 5′-AMP; Nucleotide self-association; Self-association; pH dependence (Tribolet, R.) 119

3′-AMP
2′-AMP; 5′-AMP; Nucleotide self-association; Self-association; pH dependence (Tribolet, R.) 119

5′-AMP
2′-AMP; 3′-AMP; Nucleotide self-association; Self-association; pH dependence (Tribolet, R.) 119

Anisotropy decay
Frequency-domain fluorometry; Fluorescence anisotropy; Rotational diffusion (Szmacinski, H.) 233

Assembly
Tubulin; Kinetics; Guanine nucleotide; Relaxation; Microtubule (Martin, S.R.) 67

Asymmetrical membrane
Hydrophobic thickness; Capacitance measurement (Brullemans, M.) 225

ATP
Ab initio calculation; Molecular orbital (Yoshikawa, K.) 251

Band formation
Dissipative structure; Vacuole; Diffusion; Kinetics; *(Chara)* (Toko, K.) 149

Benzo(*a*)pyrene diol epoxide
Stereoisomer; DNA adduct. Fluorescence; Linear dichroism; Conformation; Photodissociation (Zinger, D.) 131

Binding isotherm
Ligand binding; Cooperativity; Scatchard plot (Chen, Y.) 59

Ca^{2+}
Calmodulin; Fluorescence anisotropy; Time-domain fluorescence (Steiner, R.F.) 27

Calmodulin
Ca^{2+}; Fluorescence anisotropy; Time-domain fluorescence (Steiner, R.F.) 27

Capacitance measurement
Asymmetrical membrane; Hydrophobic thickness (Brullemans, M.) 225

Catecholamine
Enzyme kinetics; Transient phase; Tyrosinase; Adrenergic drug; Deoxepinephrine (Escribano, J.) 15

Cavity formation
Hydrophobic effect; Hydrophobicity (Bishop, W.H.) 197

CD
Ionophore-metal ion complex; Conformational analysis; Coordination structure (Divakar, S.) 139

Centrifugation
DNA intercalation (Richard, A.J.) 191

Cisplatin
D-Glucuronic acid; D-Gluconic acid; Transplatin; Sugar-platinum-amine interaction (Tajmir-Riahi, H.A.) 243

Cl^-
Selectivity; Molecular dynamics simulation; Gramicidin channel (Sung, S.-S.) 1

Competitive counterion binding
Conductometry; Alkali polyacrylate; Polyelectrolyte (De Jong, H.G.) 173

Conductometry
Competitive counterion binding; Alkali polyacrylate; Polyelectrolyte (De Jong, H.G.) 173

Conformation
Benzo(*a*)pyrene diol epoxide; Stereoisomer; DNA adduct; Fluorescence; Linear dichroism; Photodissociation (Zinger, D.) 131

Conformational analysis
CD; Ionophore-metal ion complex; Coordination structure (Divakar, S.) 139

Conformational change
Aldolase; Enzyme-lipid interaction; Fluorescence quenching; Temperature dependence (Gutowicz, J.) 97

Cooperativity
Ligand binding; Scatchard plot; Binding isotherm (Chen, Y.) 59
Coordination structure
CD; Ionophore-metal ion complex; Conformational analysis (Divakar, S.) 139
Deoxyepinephrine
Enzyme kinetics; Transient phase; Tyrosinase; Catecholamine; Adrenergic drug (Escribano, J.) 15
Diffusion
Dissipative structure; Band formation; Vacuole; Kinetics; *(Chara)* (Toko, K.) 149
Dipalmitoylphosphatidylcholine
DSC; Dynamic deconvolution; Heat capactiy; Kinetics; Ribonuclease A (Lopez Mayorga, O.) 87
Dissipative structure
Electric potential; Acid elongation; Enzyme activity; Nonequilibrium; (Bean root) (Toko, K.) 39
Band formation; Vacuole; Diffusion; Kinetics; *(Chara)* (Toko, K.) 149
superhelical DNA
DNA flexibility; Polyelectrolyte; Dynamic light scattering (Langowski, J.) 263
DNA adduct
Benzo(*a*)pyrene diol epoxide; Stereoisomer; Fluorescence; Linear dichroism; Conformation; Photodissociation (Zinger, D.) 131
DNA flexibility
superhelical DNA; Polyelectrolyte; Dynamic light scattering (Langowski, J.) 263
DNA intercalation
Centrifugation (Richard, A.J.) 191
DSC
Dynamic deconvolution; Heat capacity; Kinetics; Ribonuclease A; Dipalmitoylphosphatidylcholine (Lopez Mayorga, O.) 87
Dynamic deconvolution
DSC; Heat capacity; Kinetics; Ribonuclease A; Dipalmitoylphosphatidylcholine (Lopez Mayorga, O.) 87
Dynamic light scattering
F-Actin; Heavy meromyosin; Filament flexibility; Semidilute solution (Fujime, S.) 211
DNA flexibility; superhelical DNA; Polyelectrolyte (Langowski, J.) 263

Electric potential
Acid elongation; Enzyme activity; Dissipative structure; Nonequilibrium; (Bean root) (Toko, K.) 39
Enzyme activity
Electric potential; Acid elongation; Dissipative structure; Nonequilibrium; (Bean root) (Toko, K.) 39
Enzyme kinetics
Transient phase; Tyrosinase; Catecholamine; Adrenergic drug; Deoxyepinephrine (Escribano, J.) 15
Enzyme-lipid interaction
Aldolase; Fluorescence quenching; Conformational change; Temperature dependence (Gutowicz, J.) 97

Filament flexibility
Dynamic light scattering; F-Actin; Heavy meromyosin; Semidilute solution (Fujime, S.) 211
Fluorescence
Benzo(*a*)pyrene diol epoxide; Stereoisomer; DNA adduct; Linear dichroism; Conformation; Photodissociation (Zinger, D.) 131
Fluorescence anisotropy
Calmodulin; Ca^{2+}; Time-domain fluorescence (Steiner, R.F.) 27
Frequency-domain fluorometry; Anisotropy decay; Rotational diffusion (Szmacinski, H.) 233
Fluorescence quenching
Aldolase; Enzyme-lipid interaction; Conformational change; Temperature dependence (Gutowicz, J.) 97
Frequency-domain fluorometry
Fluorescence anisotropy; Anisotropy decay; Rotational diffusion (Szmacinski, H.) 233

D-Gluconic acid
D-Glucuronic acid; Cisplatin; Transplatin; Sugar-platinum-amine interaction (Tajmir-Riahi, H.A.) 243
D-Glucuronic acid
D-Gluconic acid; Cisplatin; Transplatin; Sugar-platinum-amine interaction (Tajmir-Riahi, H.A.) 243
Gramicidin
Ion pore; Polarization energy; Multipolar source (Vayl, I.S.) 7
Gramicidin channel
Selectivity; Cl^-; Molecular dynamics simulation (Sung, S.-S.) 1
Guanidinium chloride
Myoglobin; Protein denaturation; Thermodynamics; (Alligator) (Kelly, L.) 77
Guanine nucleotide
Tubulin; Assembly; Kinetics; Relaxation; Microtubule (Martin, S.R.) 67

Heat capacity
DSC; Dynamic deconvolution; Kinetics; Ribonuclease A; Dipalmitoylphosphatidylcholine (Lopez Mayorga, O.) 87
Heavy meromyosin
Dynamic light scattering; F-Actin; Filament flexibility; Semidilute solution (Fujime, S.) 211
Hydrophobic effect
Cavity formation; Hydrophobicity (Bishop, W.H.) 197
Hydrophobic thickness
Asymmetrical membrane; Capacitance measurement (Brullemans, M.) 225
Hydrophobicity
Hydrophobic effect; Cavity formation (Bishop, W.H.) 197

Indefinite self-association
Insulin; Insulin association pattern; Sedimentation equilibrium (Mark, A.E.) 103

Insulin
Insulin association pattern; Indefinite self-association; Sedimentation equilibrium (Mark, A.E.) 103
Insulin association pattern
Insulin; Indefinite self-association; Sedimentation equilibrium (Mark, A.E.) 103
Internal motion
^{1}H-NMR; ^{13}C-NMR; Piroxicam; Nuclear Overhauser effect (Rossi, C.) 255
Ion carrier transport
Tentoxin; Lipid bilayer membrane (Klotz, M.G.) 183
Ion pore
Polarization energy; Gramicidin; Multipolar source (Vayl, I.S.) 7
Ionophore-metal ion complex
CD; Conformational analysis; Coordination structure (Divakar, S.) 139

Kinetics
Tubulin; Assembly; Guanine nucleotide; Relaxation; Microtubule (Martin, S.R.) 67
DSC; Dynamic deconvolution; Heat capacity; Ribonuclease A; Dipalmitoylphosphatidylcholine (Lopez Mayorga, O.) 87
Dissipative structure; Band formation; Vacuole; Diffusion; *(Chara)* (Toko, K.) 149

Ligand binding
Cooperativity; Scatchard plot; Binding isotherm (Chen, Y.) 59
Linear dichroism
Benzo(*a*)pyrene diol epoxide; Stereoisomer; DNA adduct; Fluorescence; Conformation; Photodissociation (Zinger, D.) 131
Lipid bilayer membrane
Tentoxin; Ion carrier transport (Klotz, M.G.) 183

Microtubule
Tubulin; Assembly; Kinetics; Guanine nucleotide; Relaxation (Martin, S.R.) 67
Molecular dynamics simulation
Selectivity; Cl^{-}; Gramicidin channel (Sung, S.-S.) 1
Molecular orbital
ATP; Ab initio calculation (Yoshikawa, K.) 251
Multipolar source
Ion pore; Polarization energy; Gramicidin (Vayl, I.S.) 7
Myoglobin
Guanidinium chloride; Protein denaturation; Thermodynamics; (Alligator) (Kelly, L.) 77

^{13}C-NMR
^{1}H-NMR; Piroxicam; Nuclear Overhauser effect; Internal motion (Rossi, C.) 255
^{1}H-NMR
^{13}C-NMR; Piroxicam; Nuclear Overhauser effect; Internal motion (Rossi, C.) 255

Nonequilibrium
Electric potential; Acid elongation; Enzyme activity; Dissipative structure; (Bean root) (Toko, K.) 39
Nuclear Overhauser effect
^{1}H-NMR; ^{13}C-NMR; Piroxicam; Internal motion (Rossi, C.) 255
Nucleotide self-association
2′-AMP; 3′-AMP; 5′-AMP; Self-association; pH dependence (Tribolet, R.) 119

pH dependence
2′-AMP; 3′-AMP; 5′-AMP; Nucleotide self-association; Self-association (Tribolet, R.) 119
Photodissociation
Benzo(*a*)pyrene diol epoxide; Stereoisomer; DNA adduct; Fluorescence; Linear dichroism; Conformation (Zinger, D.) 131
Piroxicam
^{1}H-NMR; ^{13}C-NMR; Nuclear Overhauser effect; Internal motion (Rossi, C.) 255
Polarization energy
Ion pore; Gramicidin; Multipolar source (Vayl, I.S.) 7
Polyelectrolyte
Conductometry; Competitive counterion binding; Alkali polyacrylate (De Jong, H.G.) 173
DNA flexibility; superhelical DNA; Dynamic light scattering (Langowski, J.) 263
Protein denaturation
Guanidinium chloride; Myogobin; Thermodynamics; (Alligator) (Kelly, L.) 77

Relaxation
Tubulin; Assembly; Kinetics; Guanine nucleotide; Microtubule (Martin, S.R.) 67
Ribonuclease A
DSC; Dynamic deconvolution; Heat capacity; Kinetics; Dipalmitoylphosphatidylcholine (Lopez Mayorga, O.) 87
Rotational diffusion
Frequency-domain fluorometry; Fluorescence anisotropy; Anisotropy decay (Szmacinski, H.) 233

Scatchard plot
Ligand binding; Cooperativity; Binding isotherm (Chen, Y.) 59
Sedimentation equilibrium
Insulin; Insulin association pattern; Indefinite self-association (Mark, A.E.) 103
Selectivity
Cl^{-}; Molecular dynamics simulation; Gramicidin channel (Sung, S.-S.) 1
Self-association
2′-AMP; 3′-AMP; 5′-AMP; Nucleotide self-association; pH dependence (Tribolet, R.) 119
Semidilute solution
Dynamic light scattering; F-Actin; Heavy meromyosin; Filament flexibility (Fujime, S.) 211

Stereoisomer
Benzo(*a*)pyrene diol epoxide; DNA adduct; Fluorescence; Linear dichroism; Conformation; Photodissociation (Zinger, D.) 131

Sugar-platinum-amine interaction
D-Glucuronic acid; D-Gluconic acid; Cisplatin; Transplatin (Tajmir-Riahi, H.A.) 243

Temperature dependence
Aldolase; Enzyme-lipid interaction; Fluorescence quenching; Conformational change (Gutowicz, J.) 97

Tentoxin
Lipid bilayer membrane; Ion carrier transport (Klotz, M.G.) 183

Thermodynamics
Guanidinium chloride; Myoglobin; Protein denaturation; (Alligator) (Kelly, L.) 77

Time-domain fluorescence
Calmodulin; Ca^{2+}; Fluorescence anisotropy (Steiner, R.F.) 27

Transient phase
Enzyme kinetics; Tyrosinase; Catecholamine; Adrenergic drug; Deoxyepinephrine (Escribano, J.) 15

Transplatin
D-Glucuronic acid; D-Gluconic acid; Cisplatin; Sugar-platinum-amine interaction (Tajmir-Riahi, H.A.) 243

Tubulin
Assembly; Kinetics; Guanine nucleotide; Relaxation; Microtubule (Martin, S.R.) 67

Tyrosinase
Enzyme kinetics; Transient phase; Catecholamine; Adrenergic drug; Deoxyepinephrine (Escribano, J.) 15

Vacuole
Dissipative structure; Band formation; Diffusion; Kinetics; *(Chara)* (Toko, K.) 149